



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,965	11/13/2003	Junichi Ogikubo	450100-04811	9424
7590 10/07/2008				
William S. Frommer, Esq. FROMMER LAWRENCE & HAUG LLP 745 Fifth Avenue New York, NY 10151				
EXAMINER				
DURNFORD GESZVAIN, DILLON				
ART UNIT		PAPER NUMBER		
2622				
MAIL DATE		DELIVERY MODE		
10/07/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/712,965

Applicant(s)

OGIKUBO, JUNICHI

Examiner

Dillon Durnford-Geszvain

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-11, 13 and 14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-11, 13 and 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Claims **1-4, 6-11, 13 and 14** are pending, claims **1, 6, 7, 8, 13 and 14** are amended, and claims **5 and 12** are canceled.

Response to Arguments

2. Applicant's arguments with respect to claims **1** and **8** have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims **1, 2, 4, 5, 7-9, 11, 12 and 14** are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 02/39737 (Asada) (with US 2004/0081437 (Asada) being used/cited to as a translation) in view of the US 2002/0012522 (Kawakami).
5. As to claim **1**, Asada teaches an imaging apparatus comprising:
 - an imaging device 101 (see Fig. 27) for reading a signal captured by an image pickup device to generate an image signal based on the image captured by said image pickup device (see [0124]);
 - a signal processor 101 for generating image data of a predetermined frame rate based on said generated image ([0124]);
 - a controller (not shown) for controlling said imaging device or said signal

processor to set a variable frame rate of said image data to a set frame rate, said controller generating frame rate information identifying said frame rate of said image data ([0124] and note that the frame rate is set in accordance with signal 102 and generates associated information as rate information in the recording unit 103); and

a transmitter 103 for combining said frame rate information with said image data to transmit combined data ([0124]).

What Asada may not explicitly teach is generating sub-frame information identifying the frames of image data having said set frame rate higher than a normal frame rate and that are included in a frame period.

However, Asada teaches that the invention can be carried out on a digital VTR where the information would be encoded using an SMPTE standard. One of ordinary skill in the art would have recognized that another SMPTE standard, such as an MPEG standard, could have been used, such as the encoding system taught by Kawakami. In Kawakami, sub-frame information is taught to identify whether a frame is an I-frame a B-frame or a P-frame (Fig. 20 for example). This assists in playback of the video at all speeds as the sub-frame identification is key to decoding the data. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have encoded the video data in Asada using the encoding method of Kawakami and assigned sub-frame information to all frames (at all frame rates including a frame rate higher than a reference frame rate) as this would allow for the video data of Asada to be efficiently encoded.

6. As to claim **2**, Asada further teaches the imaging apparatus according to claim **1**, wherein said controller sets the variable frame rate of said image data by altering a reading frequency at which the captured signal is read from said image pickup device ([0124]).

7. As to claim **4**, see the rejection of claim **1** and note that Asada further teaches the imaging apparatus of claim **1**, wherein said controller sets the variable frame rate of said image data by altering a reading frequency at which the captured signal is read from said image pickup device and by controlling said signal processor to add said image data on a frame basis ([0124] and [0125])

8. As to claim **7**, see the rejection of claim **1** and note that Asada further teaches the imaging apparatus of claim **1**, further comprising a signal recording apparatus 103 for receiving said combined frame rate information and said sub-frame information and said image data to record the combined frame rate information and said sub-frame information and image data on a recording medium ([0133]).

9. Claims **8**, **9**, **11** and **14** are method claims that correspond to the apparatus claims **1**, **2**, **4**, **5** and **7** respectively and therefore are rejected on the same grounds but drawn to a method.

10. Claims **3** and **10** are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 02/39737 (with US 2004/0081437 (Asada) being used cited to as a translation) and US 2002/0012522 (Kawakami) and further in view of US 7,047,305 (Brooks).

As to claim **3**, see the rejection of claim **1** and note that what Asada does not teach is that the frame rate is changed through frame-skipping. However, Brooks teaches a video apparatus for changing the frame rate of an output video by frame-skipping (Column 7 lines 51-67). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used frame-skipping to vary the frame rate of Asada using the method of Brooks as this would allow for a preview image to be shown at a higher frame rate than that used to store images allowing memory space to be conserved while still allowing for accurate preview information to be obtained.

11. Claim **10** is a method claim that corresponds to the apparatus claim **3** and therefore is rejected on the same grounds but drawn to a method.

12. Claims **6** and **13** are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2004/0081437 (Asada) US 2002/0012522 (Kawakami) and further in view of US 5,359,464 (Wilkinson).

As to claim **6**, Asada is silent regarding recording an audio signal. However, Wilkinson teaches a recording apparatus for recording images at various frame rates and recording audio at a corresponding sampling rate (Column 3 lines 48-62 and

Column 4 lines 8-20). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have recorded an analog audio signal at a sampling frequency based on the set frame rate as is done in Wilkinson as this would allow for the video and audio to be read out by the apparatus of Asada in view of Wilkinson.

13. Claim **13** is a method claim that corresponds to the apparatus claim **6** and therefore is rejected on the same grounds but drawn to a method.

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dillon Durnford-Geszvain whose telephone number is (571)272-2829. The examiner can normally be reached on Monday through Friday 8 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Dillon Durnford-Geszvain

10/1/2008

/David L. Ometz/
Supervisory Patent Examiner, Art Unit 2622